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ABSTRACT

A project was undertaken to evaluate software available for teaching business and office skills and to determine which software products are currently being used by business and office occupations teachers throughout West Virginia. Ninety-four of the 164 West Virginia teachers to whom a questionnaire was mailed responded to the survey. Although most of the teachers were very interested in using microcomputer courseware, most schools represented did not have computers in the business department even though computers were located in the mathematics or science departments. Software purchased and used in the business classroom also appeared to be limited. Respondents to the survey complained that the software that is available for business and office programs is limited to instruction in typing, accounting, and word processing and that software companies frequently take as long as 4 to 6 weeks to fill orders for courseware. (This package includes evaluations of 29 software products that are currently being used in business and office occupations classrooms in West Virginia high schools and 14 additional pieces of courseware that were purchased for evaluation during the study. Each review includes information about the company producing the software, the machine(s) on which it will run, memory requirements, price, program content, and weaknesses and strengths of the individual product.) (MN)

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USING MICROCOMPUTERS IN VOCATIONAL EDUCATION TO TEACH SKILLS NEEDED IN BUSINESS AND OFFICE

West Virginia Board of Education
Division of Vocational Education

Debra Conrad - Contractor
Randolph County Board of Education
July 1, 1983 - June 30, 1984

ED 044392

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USING MICROCOMPUTERS IN VOCATIONAL EDUCATION TO TEACH SKILLS NEEDED IN BUSINESS AND OFFICE

The computer is rapidly replacing the typewriter as a means of recording data and conveying facts essential to the world of business. Many businesses have begun to use the computer terminal as the primary means of storing and communicating information. With the ability of computer systems to communicate with each other, another utilization of the computer is "electronic mail", conferences between executives, and other communications needed.

Without a doubt, the computer is an integral part of the modern business environment, and an understanding of the applications and use of computer systems is an important part of the job skills for office employees.

The computer has found virtually unlimited applications in modern business, from basic accounting functions to controlling the design and manufacturing of products. Through the years, however, six standard systems involved with the accounting applications within a business have been widely implemented. These systems are:

1. Order Entry
2. Inventory Control
3. Accounts Receivable
4. Accounts Payable
5. General Ledger
6. Payroll

These systems involved in accounting are presented in all fields of business. Due to the fact that all businesses must keep financial records to determine profit or loss and meet tax law requirements, the paperwork and accuracy of such information is evident in all businesses.

One of the largest paperwork handling problems in existence is found in the banking industry. To combat this tremendous problem, banks have turned to computer systems. Banks have also used the computer in dealing directly with their customers through an electronic transfer system, where banking transactions can be completed at any time and anywhere by using a computer.

The use of computer terminals to update accounts in banking application is common. Files are built which contain the balance in accounts in banks. Whenever a deposit or withdrawal is made, the balance in the file must be updated immediately so that it always reflects the correct amount.

It is safe to say that without computers, the banking industry could not cope with the needs of its customers.

One of the most widespread used of the computer in the office is word processing. Word processing is justified in companies for a number of reasons. Two primary ones are the rising cost of labor in preparing paperwork and an increasing amount of reporting that must be done to governmental agencies.

The use of word processing to create letters, and other paperwork is increasing, it is estimated to be a $1 billion industry now with high growth predicted in the future.

The technology of word processing is increasing the efficiency of the modern office and allows businesses to keep up with their paperwork demands.

Listed below are occupations in which the use of computers and computer skills are necessary:

Data Processing Occupations: Manager, System Analyst, Systems Programmer, Computer Programmer, Computer Operator, Equipment Technician, Scheduling Coordinator, Input/Output Clerk, Accounting Clerk, Key-to-Storage Operator, Card Punch Operator, Word Processing Operator, Punched-Card Accounting Machine Operator, File Clerk, Mail Clerk, Clerk/Typist

Clerical: Audit Clerk, Inventory Clerk, Personnel Clerk

Secretarial: Court Reporter, Executive Secretary, Medical Secretary, Word Processor

Accounting: Accountant, Internal Auditor, Budget Accountant, Certified Public Accountant, Payroll Clerk, Posting Clerk

Service: Credit Manager, Hotel Desk Clerk, Insurance Agent, Loan Clerk, Travel Agency Worker

Word Processing: Operators, Word Processing Trainee-requires typing skills, Word Processing Operator, Word Processing Specialist 1, Phototypesetting Specialist, Word Processing Trainer, Proofreader

Manager: Word Processing Supervisor, Word Processing Manager, Administrative Support Supervisor, Administrative Support Manager, Staff Analyst

The growth in office technology has created many career options that have to do with selling or maintaining word processing, such as sales representatives, trainers, freelance operators, electronic workstation specialist, consultants, or service company operators.

Occupations in which programs are most common are:

1. Accounting Clerk
2. Payroll Clerk
3. Posting Clerk
4. Word Processing Operator
5. Clerk/Typist

Use of computers in these occupations require five functions that can be taught in the business education curriculum:

Systems Function	Business Education Skills
Input	Business composition, keyboarding, oral communications, dictating skills
Processing	Rough drafting, proofreading, editing, and reusing information, basic typing application skills, setting margins and tabs
Storage/Retrieval	Filing information, storage and retrieval, record control
Output	Typewriting, machine transcription, reprographics, copying processes
Distribution/feedback	Handling mail, using data communication equipment, using the telephone, shipping services

West Virginia Business Teacher Software Survey

A survey was conducted of all West Virginia business teachers to determine software being used, and an evaluation of each software package used in the business education classroom. The evaluations were returned with the following pages of software evaluated.

A total of 164 schools were sent a survey and an evaluation form. Of the 164, 94 responded to the survey. On the evaluation form (see sample) Part II, all questions with yes answers are not listed on each software package evaluation, only those which were answered no are listed. The following pages represent information from that survey.

Area _____

Software Evaluation Form

Software Title _____ Medium: _____5" disk; _____8" disk;

_____cartridge;_____tape

Microcomputer Required: Brand _____

Model _____

Memory _____

Source of Software _____

_____

Back-up Copy Policy _____ Software Cost _____

PART 1 Program Overview and Description

1. Specific topic/skill _____

2. Purpose of Software: Teach Computer Literacy _____
   Teach Computer Operation _____
   Teach Specfic Operation _____
   Other _____

3. Appropriate grade level (circle) 1 2 3 4 5 6 7 8 9 10 11 12 adult

4. Type of program (check one or more)

_____ Simulation	_____ Tutorial	_____ Testing
_____ Educational Game	_____ Problem Solving	_____ Motivational
_____ Drill and Practice	_____ Authoring System	_____ Remediation
_____ Other (specify) _____		

5. Appropriate group instructional size: _____ individual _____ small group _____ large group

6. Does the software stand on its own, or should it be supplemented with other types of materials: _____ Yes _____ No

7. What is the target audience: average, remedial, gifted. (circle one)

8. Time Required _____ (minutes "estimated" for average use)

PART 2 Evaluation Checklist

Please check Yes, No, or Not Applicable for each question below. To add information, or to clarify an answer, use "Comments" section.

Yes	No	N/A		
___	___	___	1.	The program loads properly and runs without system errors.
___	___	___	2.	The content has educational value.
___	___	___	3.	The program content is free of race, ethnic, sex, and other sterotypes.
___	___	___	4.	The grammar, spelling and punctuation are correct.
___	___	___	5.	The program is free of technical problems.
___	___	___	6.	The instructions are clear.
___	___	___	7.	The curriculum material is logically presented and well organized.
___	___	___	8.	Graphics, sound, and color, if used do enhance the instructional presentation.
___	___	___	9.	The frame display is clear and easy to read.
___	___	___	10.	Students can easily and independently operate the program.
___	___	___	11.	The feedback is effective and appropriate.
___	___	___	12.	Cues and prompts help students to answer questions correctly.
___	___	___	13.	Students can control the pace and sequence of the program.
___	___	___	14.	There are safeguards against students "bombing" the program by erroneous inputs.
___	___	___	15.	The program evaluates final student mastery or provides total scores.
___	___	___	16.	Record-keeping is possible (within the program or through documentation worksheets)
___	___	___	17.	The teacher must monitor student use.
___	___	___	18.	Teacher can modify the program.
___	___	___	19.	Documentation is clear and comprehensive.

COMMENTS: _____

_____

PART 3 Overall Evaluation

CHECK ONE.

___Excellent program. Recommend without hesitation.
___Pretty good program. Consider purchase.
___Fair. But might want to wait for something better.
___Not useful. Do not recommend purchase.

Reviewer Name _____

AUTOMATED ACCOUNTING FOR THE MICROCOMPUTER

Apple II+ or TRS-80 48K
$20 - $45

The program contains accounting procedures for general ledgers, accounts payable, accounts receivable and payroll.

The program requires a textbook and time required depends on the students accounting ability. Students must have a solid, comprehensive accounting background to operate the system with no problems.

The program may also be used to do problems and practice sets. The program has several disadvantages, as follows:

*not free of technical problems

*no safeguard against "bombing" the program

*no final evaluation or record-keeping

*teacher can not modify the program

*does not allow students to see ledgers

*lacks needed information as students progress

*credits are shown as minus numbers, which goes against accounting principles

The overall evaluation of the program is pretty good to fair. Again, the student must have a solid background in accounting.

WORD PROCESSING

Xerox 820
$500

Software instructs students in typing and editing for word processing. The approriate grade level is grade twelve to adult.

Time required to complete the program is estimated to be sixty minutes for a small group.

The overall evaluation is pretty good, but there are some negative comments as listed:

*reference guide could be more specific

*program does not give a final evaluation

*record-keeping is not possible

*documentation is not clear and comprehensive

WORD STAR-MAGIC WAND

Cromemo CS 2

This program teaches word processing on the adult level and requires a great deal of time.

There are several problems with the program:

*the program does not load properly and run without system errors

*the program is not free of technical problems

*instructions are not clear

*curriculum material is not logically presented or well organized

*students need assistance in operating the program

*manuals are not written well

The overall evaluation of the program is that it is not useful for classroom instruction.

BASIC

Apple II+

The program teaches basic and programming skills for grades 9 to adult. Time required is twenty-five minutes for each lesson and instruction can be individual or small group. Testing is provided to evaluate the student's scores or progress.

The evaluator rated this program as pretty good and recommended purchasing the program.

BASIC TYPING

Radio Shack $29.95

Excellent program for teaching typing. The program contains drills and practice material. Time required is thirty minutes for each individual.

The program does not require the teacher to monitor the student when he or she is using the program. The teacher can not modify the program.

Excellent program, especially for the price.

MICROCOMPUTER KEYBOARDING

TRS 80 or Apple II and IIe $200

The program teaches the keyboard including the numerical keyboard. It can be used by any student that has a reading level of about sixth grade. The program contains drills and practice for individual or group instruction. Time varies with each individual but an estimated time of twenty to thirty minutes per micro would be sufficient.

The evaluator rated this program as good for teaching just the keyboard, no business letters or anything of that nature. Good for adults that need to refresh their keyboard skills. South-Western is good to replace diskettes if they get ruined. Replacement disks can be purchased for a small fee.

MICROCOMPUTER ACCOUNTING APPLICATIONS

Apple II+ and IIe or TRS-80
$125

The program contains four programs: general ledger model, accounts payable model, accounts receivable model, and the payroll model.

It is a simulation, problem solving program for grades ten to twelve. The program reinforces materials and skills learned in the text. Estimated time to complete the program is six hours.

The program is not free of technical problems, instructions are not clear at times, final evaluation is not possible and an error can not be corrected if posted (there is not enough room allowed for correcting errors).

The evaluator rated this program as pretty good, but the students must know how to process data manually to complete the program.

BASIC INFORMATION KEYBOARDING SKILLS

TRS-80 3 and 4
$200

This program teaches the keyboard for beginning typist. The program contains drills and practice for individual students. The program requires twenty-five minutes each day for six weeks to complete the program.

This is an excellent program and the evaluator recommended it without hesitation.

SUPERSCRIPT II

Commodore B118-80
$500

The program teaches skills in word processing. This is an excellent word processing program; however, the accompanying workbook/explanation text is in need of simpler and easier-to-understand format. It is necessary for the teacher to be present because of this to answer the many questions which occur.

Students can file their work on their own formated disk which makes it possible for the teacher to retrieve any of their documents. These can also be printed for grading purposes.

The evaluator recommended that the student have typing skills. The appropriate grade level is ten to adult, with individual or group instruction. The overall evaluation of the program is excellent.

STRUCTURED BASIC PROGRAMMING

IBM-PC $42

The program teaches basic programming for grades nine to adult. It takes several weeks to complete and can be used for individual or group instruction.

The evaluator rated this program as excellent. Supplemental material is necessary and available through South-Western Publishing Company.

The only negative response to the evaluation is that the teacher can not modify the program.

APPLE WRITER

Apple II+ and IIe $40

The software instructs the user in word processing skills. It requires supplemental material. The evaluator recommends a new paperback from South-Western Publishing Company that teaches The Apple Writer.

The program is appropriate for grades ten to twelve as an individual or small group instruction.

The overall evaluation of this program is that it is a pretty good program.

VISI-CALC

Apple II & IIe or TRS-80 $200

The program instructs students in entering and manipulating information on budgets, inventory, and an electronic spreadsheet. The evaluator suggested using Cdex training to accompany the program. The program contains drills and problem solving instruction.

The program requires several days to complete and is geared for individual use.

The overall evaluation of the program is pretty good. There are just a couple of places where the students may have some trouble interpreting what to do.

EASY WRITER

IBM-PC DOS 1.115 Version $169

This program can be used in a Typing III class to teach word processing. The program requires supplemental material and takes four to six weeks of instruction to enable the student to become proficient.

The appropriate grade level is grades ten to adult and can be used to instruct large or small groups. The program diskette does not contain DOS so you must load it with another diskette first. The IBM lessons that come with the program are incomplete. They just barely touch the surface of what the program will do. It requires a lot of planning on the part of the teacher. The program is not a text "teaching" program. The lessons or programmed instruction does not go far enough. Instructions are not clear, and students may need assistance in operating the program.

The overall evaluation of the program is pretty good.

MICROSOFT TYPING TUTOR

TRS-80 Level II 16K $30

This is an excellent program if used as a supplement in typing class. The program contains drills and practice and must be supplemented with other types of material.

The program teaches specific operation and can be used by the average student. This program can not be modified by the teacher, but the teacher does not have to monitor the students use of the program. Record-keeping is possible through documentation worksheets.

The overall recommendations of the program is pretty good.

"AMCAP" COMPLETE ACCOUNTING PACKAGE

Ohio Scientific $250

This program is used in the accounting class for grades eleven, twelve and adult instruction. It can be supplemented by "Automated Accounting for the Microcomputer" from South-Western Publishing Company. The program contains simulation, drills, practice and program solving functions for individual learning.

The program contains a few misspelled words. This is a very good program for accounting, but can be used on the OSI computer only.

DATA ENTRY

TRS-80, Apple II, II+ and IIe
$40-$50

The program provides dexterity and accuracy in letters, numbers, preparation and handling of source documents, correction of errors and operation of a data entry system. The user uses mostly numbers as entry in the computer. The program requires a workbook and can be used by grades twelve to adult.

Students really seem to enjoy this program and they receive a lot of exposure to various types of keyboarding activities.

This is an excellent program for training students for entering numbers on invoices, inventory, payroll, checking accounts, bank reconciliations and sales. Data entry practice is good but some problems are not logically workable (bank reconciliation). Students do not know if errors are being input.

The program can not be modified by the teacher, but the teacher does not have to monitor the students use of the program.

MEMORITE

Vector 3

This program is used in word processing and records management for students in grades ten to adult. Time required is forty-five minute class periods, for six weeks, five days a week.

The program does not evaluate the students final mastery or provide total scores. Documentation is not clear and comprehensive.

The program is good, but not for classroom use, unless used by above average students.

PEACHTREE ACCOUNTING

Vector 3

The program contains the general ledger, accounts payable, accounts receivable and payroll for a business. It has been used in a forty-five minute class period and takes approximately three weeks to do the problems specified. Recommendation would depend on the teacher not the program. Is the teacher willing to spend hours becoming familiar with the program before teaching it?

This is a business use program, not specifically made for classroom instruction. The instructions are sometimes difficult and students will need assistance sometimes. Record-keeping is not possible.

MASTER TYPE

Apple II+ $25

The program contains drills and practice for students in grades eight through twelve who would like additional practice for increasing speed and accuracy in typing.

The program requires twenty minutes for each lesson and there are eighteen lessons. Record-keeping is not possible. The program target audience would be students who are average to remedial.

The overall evaluation of this program is fair. The program could be used as supplemental or individualized training for students who need additional help with their speed and accuracy in typing.

ALL ABOUT INTEREST

TRS-80 Model III $29.95

The program contains drills and practice, solving problems, and testing for teaching interest skills.

The program can be used by an individual student or a small group. The appropriate grade level would be grade nine. This program could be used in a General Business or Business Math class.

The program is rated pretty good to fair. The program does not allow students to control the pace and sequence of the program. It does not evaluate the final student mastery or provide total scores or keep records.

The program can not be modified by the teacher, but it does not have to be monitored by the teacher.

READING AN ADVERTISEMENT

TRS-80 Model III

The program helps students to filter out good and bad advertisements. The program's grade level is grade nine, for individual or small group instruction. The program does not need any supplemental materials and requires only ten minutes to complete.

Students can not control the pace and sequence of the program. Record-keeping and program evaluation of final student mastery or total scores are not provided.

The overall evaluation of this program is pretty good.

VWRITE

Victor 9000
$495

This program is used in word processing for grades eleven to adult. It must be supplemented with other typed of material and takes ninety hours to complete.

The program contains grammar, spelling, punctuation and technical problems.

The evaluator feels this is not a good program for classroom instruction.

INVESTOR'S PARADISE

Radio Shack TRS-80 16K $20

The program reinforces procedures on purchasing stocks and bonds. It is set up as an educational game for a samll group of students in grades ten to twelve. The program requires one to one and a half hours to complete.

This program is rated as pretty good when used as supplemental work to increase interest and an understanding of how stocks and bonds are purchased.

VISIFILE

Apple IIe 64K $250

The programs specific topic or skill is inventory records. The program stands on its own. This is a difficult program and is geared to business instruction. Advanced accounting students might find this program interesting.

The program does not have any educational value, instructions are not clear and curriculum materials is not logically presented and well organized.

The overall evaluation of this program for instructional purposes is poor.

TEXT EDITOR

IBM System 34 $695

Text Editor is a word processing program for grade eleven. It contains problems for students to solve.

A small group of twelve students is the appropriate group instructional size recommended by the evaluator.

The program received an excellent evaluation, but records or final evaluation is not provided. Students can not easily and independently operate the program.

TEXTPACK II

IBM Displaywriter 128K

This program is designed only for those students who have a background in typing. It contains drills and practice for students in grades twelve to adult. It should be supplemented with other types of material.

Textpack requires fifteen hours to complete. Monitoring depends on the students ability to read and understand material in the instruction manual.

The overall evaluation of the program is excellent. IBM Textpack is excellent and students enjoy it and need very little assistance.

SCRIPSET

TRS-80 $99

This program teaches necessary skills for using the computer for word processing and keyboarding drills, practice, and problem solving for grades nine to twelve. Time for completing the program varies from ten to twelve hours. The Scripset package has enabled the teacher to teach typewriting applications such as letters, tabulations and manuscripts on the micro using word processing techniques.

Students use does not have to be monitored. The program does not evaluate the students final mastery or provide total scores.

Teachers can not modify the program and the program requires a great deal of individualized teaching. There are not safeguards against students "bombing" the program by erroneous input.

The overall evaluation of this program is pretty good.

SUPER SCRIPSET

TRS-80 or Commodore $199

This program can be used for instruction in typing documents such as letters, reports and tables. Eight taped lessons accompany the program to teach the operator how to use the TRS-80 as a word processor. This software should be supplemented when used in the classroom. Eight to twelve hours are needed to complete this program.

The program does not evaluate final student mastery or provide total scores and the teacher can not modify the program. Students my find difficulty operating the program. The instructional manual is poorly written and and contains few usable assignments, thus requires the instructor to develop many lesson plans for the program.

The evaluator rated this program as excellent.

WORDSTAR-MAIL MERGE

Zenth 89 & 90 or NEC 8000 & 8800 $395

This program gives specific instruction in word processing. The evaluator uses the Zenith for data processing and word processing. The hardware and software are excellent. Zenith support is superior, cost is lower than other brands currently in use. The standardized keyboard is industry standard, making use of the machine easy. CRT is clear and glare is limited.

Wordstar is presently the industry standard professional word processing program. The program is lengthy but worth the time. Zenith is the most versitile machine in business and education.

The overall evaluation of the program is excellent, although some instructions are not clear and the program is geared for adult education only.

SOFTWARE FOR BUSINESS EDUCATION

The following software packages were purchased and evaluated for the purpose of classroom instructional use. Equipment required for the operation of these programs were the IBM PC or the Apple computer, supplemental materials where indicated, and a printer was necessary for a few of the programs.

The following pages contain the evaluation and instructional processes and procedures used for each software package.

Listed below are the programs, source of software and price of each program:

Micro-Editor	South-Western Publishing Co.	$59.50
Video Gallery Sales and Service Simulation	" " "	59.50
Structured Basic Textbank	" " "	59.50
Alphabetic Indexing Rules	" " "	59.50
Bank Street Writer	Media Pack	69.00
Market Place	Micro Learning Ware	39.95
Profit and Loss	McGraw-Hill Book Company	99.00
You Decide	C. W. Publications	45.00
Personal Checking	" " "	45.00
Personal Investing	" " "	45.00
Super Text	Media Pack	99.00

Microcomputer Keypad Operation	South-Western	Publishing		Co.	59.50
Alphabetic Keyboarding	"	"	"	"	89.50
Tax Advantage	"	"	"	"	29.95

SUPER TEXT

This professional word processing system for the Apple is noteworthy for its ease of use and combination of powerful advanced features. This system will allow you to compose any type of document (letters, reports, forms, etc.) directly on the screen; correct or modify and portion, then print out an entire multi-page document and save it on a diskette.

Features include automatic word overflow; character, word, or line insertion and deletion; forward and backward scrolling; automatic tabbing and indentation; left and right justification; user-positioned page numbering, multi-document search and replacement of specific words or phrases; 40, 56, or 70 columns across the screen; character design capability; and superscripting and subscripting.

SUPER TEXT is the economic and technological successor to the typewriter, providing unprecedented ease in handling and manipulation of any form of written work. A printer is required.

The evaluator recommends the use of this program in an advanced typing class, word processing class or an office practice class.

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Program Area _____

Software Evaluation Form

Software Title Super Text Medium: ✓ 5" disk; ___ 8" disk;

_____ cartridge; _____ tape

Microcomputer Required: Brand Apple

Model II or IIc

Memory 48K

Source of Software Media Pack

Back-up Copy Policy 1 back up copy Software Cost $99

PART 1 Program Overview and Description

1. Specific topic/skill Word Processing

2. Purpose of Software: Teach Computer Literacy _____

Teach Computer Operation ✓

Teach Specfic Operation _____

Other Word processing skill

3. Appropriate grade level (circle) 1 2 3 4 5 6 7 8 9 (10 11 12 adult)

4. Type of program (check one or more)

___ Simulation	___ Tutorial	___ Testing
___ Educational Game	✓ Problem Solving	___ Motivational
✓ Drill and Practice	___ Authoring System	___ Remediation
___ Other (specify) _____		

5. Appropriate group instructional size: ✓ individual ___ small group ___ large group

6. Does the software stand on its own, ~~or should it be supplemented with other types of materials~~: ✓ Yes ___ No

7. What is the target audience: (average), remedial, gifted. (circle one)

8. Time Required 18-20 hrs. (~~minutes~~ "estimated" for average use)

PART 2 Evaluation Checklist

Please check Yes, No, or Not Applicable for each question below. To add information, or to clarify an answer, use "Comments" section.

Yes	No	N/A		
✓			1.	The program loads properly and runs without system errors.
✓			2.	The content has educational value.
✓			3.	The program content is free of race, ethnic, sex, and other sterotypes.
✓			4.	The grammar, spelling and punctuation are correct.
✓			5.	The program is free of technical problems.
✓			6.	The instructions are clear.
	✓		7.	The curriculum material is logically presented and well organized.
		✓	8.	Graphics, sound, and color, if used do enhance the instructional presentation.
✓			9.	The frame display is clear and easy to read.
	✓		10.	Students can easily and independently operate the program.
✓			11.	The feedback is effective and appropriate.
	✓		12.	Cues and prompts help students to answer questions correctly.
	✓		13.	Students can control the pace and sequence of the program.
	✓		14.	There are safeguards against students "bombing" the program by erroneous inputs.
	✓		15.	The program evaluates final student mastery or provides total scores.
✓			16.	Record-keeping is possible (within the program or through documentation worksheets)
	✓		17.	The teacher must monitor student use.
✓			18.	Teacher can modify the program.
✓			19.	Documentation is clear and comprehensive.

COMMENTS: Time consuming and require a great deal of instruction for beginners.

PART 3 Overall Evaluation

CHECK ONE.

___Excellent program. Recommend without hesitation.
✓ Pretty good program. Consider purchase.
___Fair. But might want to wait for something better.
___Not useful. Do not recommend purchase.

Reviewer Name _____

YOU DECIDE

In this simulation, the student plays the part of a high school junior who has taken a part-time job. The students are paid every two weeks and receive the first paycheck on Friday, March 2.

The simulation is concerned with their spending in March. During the simulation the student will do the fol-flowing:

1. Compute gross pay, deduction, and net pay for two pay periods.
2. Choose a checking and savings account from those offered by banks, savings and loan associations, and credit unions.
3. Decide how much of their money to keep in cash, how much to deposit, and how much to save.
4. During the two-week pay period, they will be confronted with ten spending situations.

The incentive for the student to spend their money is a personal finance quiz. Each problem is worth a given number of points based on its difficulty. The object for the students is to get as high a score as possible from solving the problems.

This simulation can be used by all levels of students since the four problems presented in each situation range in difficulty from simple one step arithmetic operations to more difficult multi-step arithmetic operations.

BEST COPY AVAILABLE

Program Area _____

Software Evaluation Form

Software Title You Decide Medium: ✓ 5" disk; ___ 8" disk;

___ cartridge; ___ tape

Microcomputer Required: Brand Apple IIe

Model IIe II+ III

Memory 64K

Source of Software C. W. Publications

1313 5th Avenue, Sterling, IL 61081

Back-up Copy Policy 1 Back-up Copy Software Cost $45.00

PART 1 Program Overview and Description

1. Specific topic/skill Personal Finance

2. Purpose of Software: Teach Computer Literacy ___

Teach Computer Operation ✓

Teach Specfic Operation ___

Other Personal spending and saving

3. Appropriate grade level (circle) 1 2 3 4 5 6 7 8 (9 10 11 12) adult

4. Type of program (check one or more)

✓ Simulation	___ Tutorial	___ Testing
✓ Educational Game	✓ Problem Solving	✓ Motivational
___ Drill and Practice	___ Authoring System	___ Remediation
___ Other (specify)		

5. Appropriate group instructional size: ✓ individual ✓ small group ___ large group

6. Does the software stand on its own, ~~or should it be supplemented with other types of materials~~: ✓ Yes ___ No

7. What is the target audience: (average), remedial, gifted. (circle one)

8. Time Required 120" (minutes "estimated" for average use)

BEST COPY AVAILABLE

PART 2 Evaluation Checklist

Please check Yes, No, or Not Applicable for each question below. To add information, or to clarify an answer, use "Comments" section.

Yes	No	N/A		
✓			1.	The program loads properly and runs without system errors.
✓			2.	The content has educational value.
✓			3.	The program content is free of race, ethnic, sex, and other sterotypes.
✓			4.	The grammar, spelling and punctuation are correct.
✓			5.	The program is free of technical problems.
✓			6.	The instructions are clear.
✓			7.	The curriculum material is logically presented and well organized.
		✓	8.	Graphics, sound, and color, if used do enhance the instructional presentation.
✓			9.	The frame display is clear and easy to read.
✓			10.	Students can easily and independently operate the program.
✓			11.	The feedback is effective and appropriate.
	✓		12.	Cues and prompts help students to answer questions correctly.
✓			13.	Students can control the pace and sequence of the program.
✓			14.	There are safeguards against students "bombing" the program by erroneous inputs.
✓			15.	The program evaluates final student mastery or provides total scores.
✓			16.	Record-keeping is possible (within the program or through documentation worksheets)
	✓		17.	The teacher must monitor student use.
	✓		18.	Teacher can modify the program.
✓			19.	Documentation is clear and comprehensive.

COMMENTS: _____

_____

PART 3 Overall Evaluation

CHECK ONE.

✓ Excellent program. Recommend without hesitation.

___ Pretty good program. Consider purchase.

___ Fair. But might want to wait for something better.

___ Not useful. Do not recommend purchase.

Reviewer Name _____

I used this program in my General Busines class after the students had completed Unit 6-Banking Services and Unit 9-Saving and Investing. The students enjoyed the program and felt they had experienced actual management of their money.

I highly recommend this program.

MICROCOMPUTER KEYPAD OPERATION

Microcomputer Keypad Operation is a simple diskette consisting of seven 25-minute activities. Activities 1-4 present and provide practice on the keys of a standard 10-key numeric keypad of a microcomputer (or calculator). Activities 5-6 provide additional drills to increase "touch" operation skill. Activity 7 consists of a series of applied data entry/editing activities using common business forms (sales slips, bank deposit slips, etc).

A backup diskette is included for each diskette except for the Corvus which does not require a backup.

While running this disc, the evaluator found an error in a line and the program could not be completely run. The program had to be returned and replaced. Due to the time period of this evaluation, the program can not be evaluated for use in the classroom for instruction in a business class.

ALPHABETIC INDEXING RULES

This learner-oriented software package prepares students to become proficient in basic alphabetic indexing through the use of the microcomputer. The alphabetizing rules presented are comprehensive, easy to learn, and reflective of current business practices. After some practice in the text-workbook, students will have the opportunity to apply their skills on the microcomputer through a variety of alphabetizing exercises. Solutions for all problems are provided, giving students immediate feedback on their work.

This software package can be used in a Secreterial Office Practice class, or any class that a teacher sees a need for indexing skills. The program can be used for learning, reviewing, or testing indexing and alphabetizing skills.

Program Area Business Education

41A

Software Evaluation Form

Software Title Alphabetic Indexing Rules Medium: ✓ 5" disk; ____ 8" disk;

____ cartridge; ____ tape

Microcomputer Required: Brand Apple IIe

Model ____

Memory ____

Source of Software South-Western Publishing Company

Back-up Copy Policy One provided for each one purchased Software Cost $59.95

PART 1 Program Overview and Description

1. Specific topic/skill Indexing Rules
2. Purpose of Software: Teach Computer Literacy ____
   Teach Computer Operation ____
   Teach Specfic Operation ____
   Other Filing Rules
3. Appropriate grade level (circle) 1 2 3 4 5 6 7 8 9 (10) (11) (12) (adult)
4. Type of program (check one or more)

____	Simulation	X	Tutorial	____	Testing
____	Educational Game	____	Problem Solving	____	Motivational
X	Drill and Practice	____	Authoring System	____	Remediation
____	Other (specify) ____				

5. Appropriate group instructional size: ✓ individual ____ small group ____ large group
6. Does the software stand on its own, or should it be supplemented with other types of materials: ✓ Yes ____ No NO yes
7. What is the target audience: (average) remedial, gifted. (circle one)
8. Time Required 45* (minutes "estimated" for average use)

PART 2 Evaluation Checklist

Please check Yes, No, or Not Applicable for each question below. To add information, or to clarify an answer, use "Comments" section.

Yes	No	N/A		
✓			1.	The program loads properly and runs without system errors.
✓			2.	The content has educational value.
✓			3.	The program content is free of race, ethnic, sex, and other sterotypes.
✓			4.	The grammar, spelling and punctuation are correct.
✓			5.	The program is free of technical problems.
✓			6.	The instructions are clear.
✓			7.	The curriculum material is logically presented and well organized.
		✓	8.	Graphics, sound, and color, if used do enhance the instructional presentation.
✓			9.	The frame display is clear and easy to read.
✓			10.	Students can easily and independently operate the program.
✓			11.	The feedback is effective and appropriate.
✓			12.	Cues and prompts help students to answer questions correctly.
✓			13.	Students can control the pace and sequence of the program.
✓			14.	There are safeguards against students "bombing" the program by erroneous inputs.
✓			15.	The program evaluates final student mastery or provides total scores.
✓			16.	Record-keeping is possible (within the program or through documentation worksheets)
✓			17.	The teacher must monitor student use.
✓			18.	Teacher can modify the program.
✓			19.	Documentation is clear and comprehensive.

COMMENTS: Students enjoy it because it gives them a break from "my" teaching to "their" use of the computer.

PART 3 Overall Evaluation

CHECK ONE.

✓ Excellent program. Recommend without hesitation.
___ Pretty good program. Consider purchase.
___ Fair. But might want to wait for something better.
___ Not useful. Do not recommend purchase.

Reviewer Name _____

STRUCTURED BASIC TEXTBANK

This program is used to develop tests for the textbook, Structured Basic. Time required to print a test is five minutes. This program is not a teaching or learning program, it is used to develop tests, record the tests, and then give an evaluation and progress report to the student.

The textbook, Structured Basic, is mandatory for the use of this software.

Pr Area _____

42A

Software Evaluation Form

oftware Title Structured Basic Test Diskette Medium: ✓ 5" disk; ____ 8" disk; _____ cartridge; _____ tape

icrocomputer Required: Brand Apple II and IIe

Model _____

Memory _____

ource of Software South-Western Publishing Co

ack-up Copy Policy 1 Backup Software Cost $59.50

PART 1 Program Overview and Description

. Specific topic/skill Tests for Textbook - Structured Basic

. Purpose of Software: Teach Computer Literacy ✓

Teach Computer Operation ✓

Teach Specfic Operation ____

Other _____

. Appropriate grade level (circle) 1 2 3 4 5 6 7 8 (9 10 11 12 adult)

. Type of program (check one or more)

____ Simulation	____ Tutorial	✓ Testing
____ Educational Game	____ Problem Solving	____ Motivational
____ Drill and Practice	____ Authoring System	____ Remediation
____ Other (specify) _____		

5. Appropriate group instructional size: ____ individual ____ small group ✓ large group

6. Does the software stand on its own, or should it be supplemented with other types of materials: ✓ Yes ____ No

7. What is the target audience: (average), remedial, gifted. (circle one)

8. Time Required 5 minutes (minutes "estimated" for average use)
to print stencil of test

ART 2 Evaluation Checklist

Please check Yes, No, or Not Applicable for each question below. To add formation, or to clarify an answer, use "Comments" section.

es	No	N/A		
✓			1.	The program loads properly and runs without system errors.
✓			2.	The content has educational value.
✓			3.	The program content is free of race, ethnic, sex, and other sterotypes.
✓			4.	The grammar, spelling and punctuation are correct.
✓			5.	The program is free of technical problems.
✓			6.	The instructions are clear.
✓			7.	The curriculum material is logically presented and well organized.
		✓	8.	Graphics, sound, and color, if used do enhance the instructional presentation.
✓			9.	The frame display is clear and easy to read.
		✓	10.	Students can easily and independently operate the program.
		✓	11.	The feedback is effective and appropriate.
		✓	12.	Cues and prompts help students to answer questions correctly.
		✓	13.	Students can control the pace and sequence of the program.
		✓	14.	There are safeguards against students "bombing" the program by erroneous inputs.
		✓	15.	The program evaluates final student mastery or provides total scores.
		✓	16.	Record-keeping is possible (within the program or through documentation worksheets)
		✓	17.	The teacher must monitor student use.
	✓		18.	Teacher can modify the program.
✓			19.	Documentation is clear and comprehensive.

MENTS: Excellent source of test material if you are using the accompanying textbook.

ART 3 Overall Evaluation

HECK ONE.

✓ Excellent program. Recommend without hesitation.
___ Pretty good program. Consider purchase.
___ Fair. But might want to wait for something better.
___ Not useful. Do not recommend purchase.

Reviewer Name _____

VIDEO GALLEY SALES AND SERVICE SIMULATION

This automated accounting simulation "employ" students in a wholesale video supply company specializing in the sales and service of video equipment. Students will use the microcomputer to process accounting transactions which involve purchases and sales on accounts, correcting and adjusting entries, sales discounts, credit terms, and purchase discounts. Students work with data from integrated general ledger, integrated accounts payable, and integrated accounts receivable systems. Also, the vendor file, and opening balances to provide added realism.

A minimum of 48K memory, 2 disk drives, one 80-column printer, and 5-7 class hours are required to complete this simulation.

The evaluator recommends the use of this program in an accounting class. Students who have completed Part 5 of the Century 21 Accounting cycle would enjoy this simulation. If computers are available in the classroom, I recommend the use of this simulation instead of the Business Simulation 3. The students receive training from accounting simulations and using the computer would give the student additional training similar to actual accounting practiced in business today.

Program Area _____

43A

Software Evaluation Form

Software Title Video Gallery Medium: ✓ 5" disk; ____ 8" disk;

_____ cartridge; _____ tape

Microcomputer Required: Brand Apple II+ and IIe (also available for TRS 80

Model _____

Memory 48K

Source of Software South-Western Publishing Company

Back-up Copy Policy 1 backup copy Software Cost $59.50

PART 1 Program Overview and Description

1. Specific topic/skill Accounting Simulation
2. Purpose of Software: Teach Computer Literacy _____
   Teach Computer Operation _____
   Teach Specfic Operation _____
   Other Teach Computer Accounting
3. Appropriate grade level (circle) 1 2 3 4 5 6 7 8 9 10 (11 12 adult)
4. Type of program (check one or more)

✓ Simulation	✓ Tutorial	✓ Testing
____ Educational Game	____ Problem Solving	✓ Motivational
✓ Drill and Practice	✓ Authoring System	____ Remediation
____ Other (specify) _____		

5. Appropriate group instructional size: ✓ individual ✓ small group ____ large group
6. ~~Does the software stand on its own, or~~ should it be supplemented with other types of materials: ✓ Yes ____ No
7. What is the target audience: (average) remedial, gifted. (circle one)
8. Time Required 5-7 class hrs. ~~(minutes~~ "estimated" for average use)

ART 2 Evaluation Checklist

Please check Yes, No, or Not Applicable for each question below. To add information, or to clarify an answer, use "Comments" section.

Yes	No	N/A		
✓			1.	The program loads properly and runs without system errors.
✓			2.	The content has educational value.
✓			3.	The program content is free of race, ethnic, sex, and other sterotypes.
✓			4.	The grammar, spelling and punctuation are correct.
✓			5.	The program is free of technical problems.
✓			6.	The instructions are clear.
✓			7.	The curriculum material is logically presented and well organized.
✓			8.	Graphics, sound, and color, if used do enhance the instructional presentation.
✓			9.	The frame display is clear and easy to read.
✓			10.	Students can easily and independently operate the program.
✓			11.	The feedback is effective and appropriate.
✓			12.	Cues and prompts help students to answer questions correctly.
✓			13.	Students can control the pace and sequence of the program.
✓			14.	There are safeguards against students "bombing" the program by erroneous inputs.
✓			15.	The program evaluates final student mastery or provides total scores.
✓			16.	Record-keeping is possible (within the program or through documentation worksheets)
✓			17.	The teacher must monitor student use.
✓			18.	Teacher can modify the program.
✓			19.	Documentation is clear and comprehensive.

COMMENTS: _____

ART 3 Overall Evaluation

CHECK ONE.

- ___ Excellent program. Recommend without hesitation.
- ✓ Pretty good program. Consider purchase.
- ___ Fair. But might want to wait for something better.
- ___ Not useful. Do not recommend purchase.

Reviewer Name _____

MICRO EDITOR

The objective of the Micro Editor is to teach students, by means of step-by-step application, the basic concepts and features of a text-editing program utilizing a microcomputer.

The Micro Editor is designed for students who have had no computer experience. The students must have typewriting skills, however. Each student needs approximately five hours to complete all four lessons.

The evaluator recommends the use of this program in a computer literacy class or word processing, or Typing II class. Micro Editor has very little value because it is too simple and does very little. It would be useful if nothing else is available.

Program Area _____

44A

Software Evaluation Form

Software Title The Micro-Editor Medium: ✓ 5" disk; ____ 8" disk;

____ cartridge; ____ tape

Microcomputer Required: Brand Apple

Model II+ and IIe

Memory 48K

Source of Software South Western Publishing Co.

Back-up Copy Policy 1 backup copy Software Cost #59.50

PART 1 Program Overview and Description

1. Specific topic/skill Basic concepts and abilities of a text-editing program

2. Purpose of Software: Teach Computer Literacy ____
   Teach Computer Operation ____
   Teach Specfic Operation ✓
   Other ____

3. Appropriate grade level (circle) 1 2 3 4 5 6 7 8 9 10 [11 12 adult]

4. Type of program (check one or more)

____ Simulation	____ Tutorial	____ Testing
____ Educational Game	____ Problem Solving	____ Motivational
✓ Drill and Practice	____ Authoring System	____ Remediation
____ Other (specify) ____		

5. Appropriate group instructional size: ____ individual ____ small group ____ large group

6. ~~Does the software stand on its own; or~~ should it be supplemented with other types of materials: ✓ Yes ____ No The Micro-Editor Text-Workbook

7. What is the target audience: (average) remedial, gifted. (circle one)

8. Time Required 5-7 hrs (~~minutes~~ "estimated" for average use)

PART 2 Evaluation Checklist

Please check Yes, No, or Not Applicable for each question below. To add information, or to clarify an answer, use "Comments" section.

Yes	No	N/A		
✓			1.	The program loads properly and runs without system errors.
✓			2.	The content has educational value.
✓			3.	The program content is free of race, ethnic, sex, and other sterotypes.
✓			4.	The grammar, spelling and punctuation are correct.
✓			5.	The program is free of technical problems.
✓			6.	The instructions are clear.
✓			7.	The curriculum material is logically presented and well organized.
		✓	8.	Graphics, sound, and color, if used do enhance the instructional presentation.
✓			9.	The frame display is clear and easy to read.
✓			10.	Students can easily and independently operate the program.
		✓	11.	The feedback is effective and appropriate.
		✓	12.	Cues and prompts help students to answer questions correctly.
✓			13.	Students can control the pace and sequence of the program.
✓			14.	There are safeguards against students "bombing" the program by erroneous inputs.
	✓		15.	The program evaluates final student mastery or provides total scores.
		✓	16.	Record-keeping is possible (within the program or through documentation worksheets)
	✓		17.	The teacher must monitor student use.
	✓		18.	Teacher can modify the program.
	✓		19.	Documentation is clear and comprehensive.

COMMENTS: _____

_____

PART 3 Overall Evaluation

CHECK ONE.

✓ Excellent program. Recommend without hesitation.
✓ Pretty good program. Consider purchase.
___ Fair. But might want to wait for something better.
___ Not useful. Do not recommend purchase.

Reviewer Name _____

PERSONAL INVESTING

Personal Investing is designed to meet the following instructional objectives:

1. To teach the basic principles of investing
2. To develop reasoning skills
3. To practice basic arithmetic computations
4. To give hands-on experience in the use of the microcomputer.

The program disk is designed to be used by up to twenty students with each student using a code to keep their transactions confidential. The instructor can remove all student transactions from the disk. Each student begins the simulation with $4,000 and is given twelve opportunities to buy and sell from a portfolio of ten stocks, bonds, commodities, and mutual funds. The computer presents each student with the economic news needed to make investment decisions, graphs changing investment prices, and maintains the students current holdings. Each student must analyze the economic news, make investment decisions, and arithmetically compute brokerage fees, money spent on purchases, money received from sales, and interest earned on savings.

Both the investment simulation and the computer instructions are designed on the assumption that the student need know nothing about investing or the microcomputer. It is expected that the student will not understand all the

Program Area _____

45A

Software Evaluation Form

Software Title Personal Investing Medium: ✓ 5" disk; ____ 8" disk;

_____ cartridge; _____ tape

Microcomputer Required: Brand Apple

Model IIe

Memory _____

Source of Software C.W. Publication

1313 5th Ave. Sterling, IL 61081

Back-up Copy Policy 1 backup copy Software Cost 45.00

PART 1 Program Overview and Description

1. Specific topic/skill To teach the basic principles of Investing

2. Purpose of Software: Teach Computer Literacy _____
   Teach Computer Operation _____
   Teach Specfic Operation ✓
   Other _____

3. Appropriate grade level (circle) 1 2 3 4 5 6 7 8 (9 10 11 12) adult

4. Type of program (check one or more)

✓ Simulation	____ Tutorial	____ Testing
✓ Educational Game	____ Problem Solving	✓ Motivational
____ Drill and Practice	____ Authoring System	____ Remediation
____ Other (specify) _____		

5. Appropriate group instructional size: ✓ individual ____ small group ____ large group

6. Does the software stand on its own, ~~or should it be supplemented with other types of materials~~: ✓ Yes ____ No

7. What is the target audience: (average,) remedial, gifted. (circle one)

8. Time Required 120" (minutes "estimated" for average use)

PART 2 Evaluation Checklist

Please check Yes, No, or Not Applicable for each question below. To add information, or to clarify an answer, use "Comments" section.

Yes	No	N/A		
✓			1.	The program loads properly and runs without system errors.
✓			2.	The content has educational value.
✓			3.	The program content is free of race, ethnic, sex, and other sterotypes.
✓			4.	The grammar, spelling and punctuation are correct.
✓			5.	The program is free of technical problems.
✓			6.	The instructions are clear.
✓			7.	The curriculum material is logically presented and well organized.
		✓	8.	Graphics, sound, and color, if used do enhance the instructional presentation.
✓			9.	The frame display is clear and easy to read.
✓			10.	Students can easily and independently operate the program.
			11.	The feedback is effective and appropriate.
	✓		12.	Cues and prompts help students to answer questions correct'
✓			13.	Students can control the pace and sequence of the program.
✓			14.	There are safeguards against students "bombing" the program by erroneous inputs.
✓			15.	The program evaluates final student mastery or provides total scores.
✓			16.	Record-keeping is possible (within the program or through documentation worksheets)
	✓		17.	The teacher must monitor student use.
	✓		18.	Teacher can modify the program.
✓		✓	19.	Documentation is clear and comprehensive.

COMMENTS: _____

_____

PART 3 Overall Evaluation

CHECK ONE.

✓ Excellent program. Recommend without hesitation.

___ Pretty good program. Consider purchase.

___ Fair. But might want to wait for something better.

___ Not useful. Do not recommend purchase.

Reviewer Name _____

information given in the news releases and that they will make investment errors and learn by them.

The evaluator recommends the use of this program in a General Business class or an Accounting class.

PROFIT AND LOSS

Profit and Loss gives students an opportunity to discover a number of economic concepts for themselves. As students participate in this microcomputer simulation, they will make pricing and advertising decisions that affect the profit or loss made by a fictional business. Their decisions will be used as the input for a computerized economic model of the Magiclay Manufacturing Company's factory outlet store. The students will be provided with feedback on their decisions through a computer-generated income statement for the factory outlet store. Using their income statements, students will discover the relationships among supply, demand, a product's price, and advertising. Together, the students will create supply and demand curves for Magiclay's major product and determine its equilibrium price.

Profit and Loss is divided into five 50-minute class sessions. In addition to the in-class time required to teach the simulation, the instructor must take some time to become familiar with each session. The instructor will also have to spend out-of-class time to prepare and duplicate the materials for each session. Sessions 2 through 5 require the use of the microcomputer for approximately twenty minutes per session at some time before the next class.

The evaluator recommends the use of this program in an accounting class. The simulation is presented through instruction-led discussion. Teams can be organized and encouraged to submit new prices and a new advertising budget in an attempt to better their previous net profit and achieve the highest profit in the class. If any team or student is able to achieve a new profit in excess of $32,-500, encouragement is given to the team member to enter the National Profit and Loss Competition.

Program Area _____

48A

Software Evaluation Form

Software Title Profit and Loss Medium: ✓ 5" disk; ____ 8" disk;

_____ cartridge; _____ tape

Microcomputer Required: Brand Apple

Model IIe

Memory at least 16 K

Source of Software Gregg / McGraw-Hill Co

Back-up Copy Policy No Software Cost $99.00

PART 1 Program Overview and Description

1. Specific topic/skill Simulation which introduce economic Concepts.

2. Purpose of Software: Teach Computer Literacy _____
   Teach Computer Operation ✓
   Teach Specfic Operation _____
   Other Economic Concept

3. Appropriate grade level (circle) 1 2 3 4 5 6 7 8 9 (10 11 12 adult)

4. Type of program (check one or more)

✓ Simulation	____ Tutorial	____ Testing
____ Educational Game	____ Problem Solving	____ Motivational
____ Drill and Practice	____ Authoring System	____ Remediation
____ Other (specify) _____		

5. Appropriate group instructional size: ✓ individual ✓ small group ____ large group

6. Does the software stand on its own, ~~or should it be supplemented with other types of materials~~: ✓ Yes ____ No

7. What is the target audience: (average,) remedial, gifted. (circle one)

8. Time Required 5 - 50" (minutes "estimated" for average use)
   Class session

PART 2 Evaluation Checklist

Please check Yes, No, or Not Applicable for each question below. To add information, or to clarify an answer, use "Comments" section.

Yes	No	N/A		
✓			1.	The program loads properly and runs without system errors.
✓			2.	The content has educational value.
✓			3.	The program content is free of race, ethnic, sex, and other sterotypes.
✓			4.	The grammar, spelling and punctuation are correct.
✓			5.	The program is free of technical problems.
✓			6.	The instructions are clear.
✓			7.	The curriculum material is logically presented and well organized.
✓			8.	Graphics, sound, and color, if used do enhance the instructional presentation.
✓			9.	The frame display is clear and easy to read.
✓			10.	Students can easily and independently operate the program.
✓			11.	The feedback is effective and appropriate.
✓			12.	Cues and prompts help students to answer questions correctly.
✓			13.	Students can control the pace and sequence of the program.
✓			14.	There are safeguards against students "bombing" the program by erroneous inputs.
✓			15.	The program evaluates final student mastery or provides total scores.
✓			16.	Record-keeping is possible (within the program or through documentation worksheets)
✓ ?	✓		17.	The teacher must monitor student use.
	✓		18.	Teacher can modify the program.
✓			19.	Documentation is clear and comprehensive.

COMMENTS: Requires a lot of planning by the instructor

PART 3 Overall Evaluation

CHECK ONE.

✓ Excellent program. Recommend without hesitation.
___ Pretty good program. Consider purchase.
___ Fair. But might want to wait for something better.
___ Not useful. Do not recommend purchase.

Reviewer Name _____

PERSONAL CHECKING

Personal Checking for the microcomputer is designed to give students experience in the operation of the microcomputer and its practical application while teaching the principles of maintaining a personal checking account. The unit consists of a simulated four month cycle (January through April) in which each student uses the microcomputer to create a check register and reconcile the register monthly against an account statement.

Step-by-step directions are given to lead each student through the use of the microcomputer. No previous experience is necessary or expected. Each student will be able to work individually and should be able to complete the unit in four class hours.

The program was used as supplemental material in a General Business class after Unit 6-Using Banking Services.

Program Area _____

49A

Software Evaluation Form

Software Title Personal Checking Medium: ✓ 5" disk; ___ 8" disk;

___ cartridge; ___ tape

Microcomputer Required: Brand Apple | TRS-80

Model IIe, IIc, III | I III IV

Memory _____

Source of Software C. W. Publications

Back-up Copy Policy 1 back-up copy Software Cost $45.00

Company allows duplication within the school.

PART 1 Program Overview and Description

1. Specific topic/skill Principles of Maintaining a Personal Checking Account
2. Purpose of Software: Teach Computer Literacy ___
   Teach Computer Operation ✓
   Teach Specfic Operation ___
   Other principles of maintaining a checking
3. Appropriate grade level (circle) 1 2 3 4 5 6 7 8 (9 10 11 12) adult
4. Type of program (check one or more)

✓ Simulation	___ Tutorial	___ Testing
✓ Educational Game	✓ Problem Solving	✓ Motivational
___ Drill and Practice	___ Authoring System	___ Remediation
___ Other (specify) _____		

5. Appropriate group instructional size: ✓ individual ✓ small group ___ large group
6. Does the software stand on its own, ~~or should it be supplemented with other types of materials~~: ✓ Yes ___ No
7. What is the target audience: (average) remedial, gifted. (circle one)
8. Time Required four hours (~~minutes~~ "estimated" for average use)

PART 2 Evaluation Checklist

Please check Yes, No, or Not Applicable for each question below. To add information, or to clarify an answer, use "Comments" section.

Yes	No	N/A		
✓			1.	The program loads properly and runs without system errors.
✓			2.	The content has educational value.
✓			3.	The program content is free of race, ethnic, sex, and other sterotypes.
✓			4.	The grammar, spelling and punctuation are correct.
✓			5.	The program is free of technical problems.
	✓ sometimes!		6.	The instructions are clear.
✓			7.	The curriculum material is logically presented and well organized.
✓			8.	Graphics, sound, and color, if used do enhance the instructional presentation.
✓			9.	The frame display is clear and easy to read.
✓			10.	Students can easily and independently operate the program.
✓			11.	The feedback is effective and appropriate.
✓			12.	Cues and prompts help students to answer questions correctly.
✓			13.	Students can control the pace and sequence of the program.
✓			14.	There are safeguards against students "bombing" the program by erroneous inputs.
✓			15.	The program evaluates final student mastery or provides total scores.
✓			16.	Record-keeping is possible (within the program or through documentation worksheets)
✓			17.	The teacher must monitor student use.
	✓		18.	Teacher can modify the program.
✓			19.	Documentation is clear and comprehensive.

COMMENTS: Students enjoy this program very much!

PART 3 Overall Evaluation

CHECK ONE.

✓ Excellent program. Recommend without hesitation.
___ Pretty good program. Consider purchase.
___ Fair. But might want to wait for something better.
___ Not useful. Do not recommend purchase.

Reviewer Name _____

ALPHABETIC KEYBOARDING

The software package is a set of two microcomputer diskettes consisting of eighteen 25-minute lessons. The lessons present and provide practice on all the letter keys and the most frequent used punctuation keys.

All instructions, technique graphics, and practice copy appear on the screen to guide the students learning. A variety of skill-building drills and feedback tactics are used to assume maximum learning and skill growth.

This program can be used for those students who need extra practice on the keyboard or for individualized instruction. The program teaches keyboarding, homerow, all techniques and posture at the typewriter. The students must go through each drill and complete each drill before progressing on to the next phase of the program.

This is an excellent program and students enjoy using it.

Program Area _____

50A

Software Evaluation Form

Software Title Alphabetic Keyboarding Medium: ✓ 5" disk; ____ 8" disk;
____ cartridge; ____ tape

Microcomputer Required: Brand IBM
Model PC
Memory 64K

Source of Software South Western Publishing Co.

Back-up Copy Policy 1 copy Software Cost $89.50

PART 1 Program Overview and Description

1. Specific topic/skill Keyboarding - Typing

2. Purpose of Software: Teach Computer Literacy ____
Teach Computer Operation ____
Teach Specfic Operation ✓
Other Typing

3. Appropriate grade level (circle) 1 2 3 4 5 6 7 8 (9 10 11 12) adult

4. Type of program (check one or more)

____ Simulation	____ Tutorial	____ Testing
____ Educational Game	____ Problem Solving	____ Motivational
✓ Drill and Practice	____ Authoring System	____ Remediation
____ Other (specify) ____		

5. Appropriate group instructional size: ✓ individual ____ small group ____ large group

6. Does the software stand on its own, ~~or should it be supplemented with other types of materials~~: ✓ Yes ____ No

7. What is the target audience: (average), remedial, gifted. (circle one)

8. Time Required 30 (minutes "estimated" for average use)

PART 2 Evaluation Checklist

Please check Yes, No, or Not Applicable for each question below. To add information, or to clarify an answer, use "Comments" section.

Yes	No	N/A		
✓			1.	The program loads properly and runs without system errors.
✓			2.	The content has educational value.
✓			3.	The program content is free of race, ethnic, sex, and other sterotypes.
✓			4.	The grammar, spelling and punctuation are correct.
✓			5.	The program is free of technical problems.
✓			6.	The instructions are clear.
		✓	7.	The curriculum material is logically presented and well organized.
✓			8.	Graphics, sound, and color, if used do enhance the instructional presentation.
✓			9.	The frame display is clear and easy to read.
✓			10.	Students can easily and independently operate the program.
✓			11.	The feedback is effective and appropriate.
✓			12.	Cues and prompts help students to answer questions correctly.
	✓		13.	Students can control the pace and sequence of the program.
✓			14.	There are safeguards against students "bombing" the program by erroneous inputs.
✓			15.	The program evaluates ~~final~~ parts student mastery or provides total scores.
		✓	16.	Record-keeping is possible (within the program or through documentation worksheets)
✓			17.	The teacher must monitor student use.
	✓		18.	Teacher can modify the program.
		✓	19.	Documentation is clear and comprehensive.

COMMENTS: Good for students who need extra practice in Typing.

PART 3 Overall Evaluation

CHECK ONE.

✓ Excellent program. Recommend without hesitation.

___ Pretty good program. Consider purchase.

___ Fair. But might want to wait for something better.

___ Not useful. Do not recommend purchase.

Reviewer Name _____

BANK STREET WRITER

The Bank Street Writer is a word processing program designed for use in the classroom. It enables students to create and edit reports or other written material; move text; search and replace; and rewrite text without feeling like it is a chore; and use all these abilities quickly and easily.

A backup diskette is included for each diskette.

This program was not received until June 11, 1984. At that time, school was not in session for students and therefore, the program has not been evaluated. On the recommendations of other educators who have used this program, I would recommend the purchase of this program for use in the classroom.

MARKETPLACE

Marketplace is a user-friendly program. The only experience needed to operate Marketplace is in placing the diskette into the drive unit, closing the drive door and turning on the Apple computer. The program will then provide you with periodic operating instructions all the way to the end of the program.

Marketplace is operator safe. Pressing a wrong key by mistake will not crash (shut down) the program.

Suggested Instructional Procedure:

The teacher should work through the entire program to become acquainted with it. Encouragement is given for wrong answers in order to see how a program allows for incorrect responses, reviews the concept and returns the operator to the original question.

Marketplace can be used after the teacher has introduced students to the laws of Supply and Demand and have them read the chapter or section in the textbook the teacher is using. Marketplace is designed to extend and reinforce students understanding of how changes in supply, demand, or both affect consumer prices and the quantity offered for sale by suppliers. Those of you who are not teaching Economics can focus on the price and quantity fluxation caused by changes in Supply or Demand, or from simultaneous changes in both Supply and Demand.

Program Size _____

52A

Software Evaluation Form

Software Title Marketplace Medium: ✓ 5" disk; ____ 8" disk;

_____ cartridge; _____ tape

Microcomputer Required: Brand Apple II, IIe

Model _____

Memory at least 32K of RAM

Source of Software Micro Learningware

Highway 66 South, Box 307, Mankato, MN 56002-0307

Back-up Copy Policy Provided Software Cost $39.95

PART 1 Program Overview and Description

1. Specific topic/skill Introduce student to the laws of Supply and Demand

2. Purpose of Software: Teach Computer Literacy _____

Teach Computer Operation _____

Teach Specfic Operation _____

Other Teach Concept of Supply and Demand

3. Appropriate grade level (circle) 1 2 3 4 5 6 7 8 9 10 11 12 adult

4. Type of program (check one or more)

____ Simulation	✓ Tutorial	✓ Testing
✓ Educational Game	✓ Problem Solving	✓ Motivational
✓ Drill and Practice	____ Authoring System	____ Remediation
____ Other (specify) _____		

5. Appropriate group instructional size: ✓ individual ✓ small group ✓ large group

6. Does the software stand on its own, or should it be supplemented with other types of materials: ✓ Yes ____ No

7. What is the target audience: (average), remedial, gifted. (circle one)

8. Time Required 20-30 (minutes "estimated" for average use)

PART 2 Evaluation Checklist

Please check Yes, No, or Not Applicable for each question below. To add information, or to clarify an answer, use "Comments" section.

Yes	No	N/A		
✓			1.	The program loads properly and runs without system errors.
✓			2.	The content has educational value.
✓			3.	The program content is free of race, ethnic, sex, and other sterotypes.
✓			4.	The grammar, spelling and punctuation are correct.
✓			5.	The program is free of technical problems.
✓			6.	The instructions are clear.
✓			7.	The curriculum material is logically presented and well organized.
✓			8.	Graphics, sound, and color, if used do enhance the instructional presentation.
✓			9.	The frame display is clear and easy to read.
✓			10.	Students can easily and independently operate the program.
✓			11.	The feedback is effective and appropriate.
✓			12.	Cues and prompts help students to answer questions correctly.
✓			13.	Students can control the pace and sequence of the program
✓			14.	There are safeguards against students "bombing" the program by erroneous inputs.
	✓		15.	The program evaluates final student mastery or provides total scores.
✓			16.	Record-keeping is possible (within the program or through documentation worksheets)
	✓		17.	The teacher must monitor student use.
	✓		18.	Teacher can modify the program.
		✓	19.	Documentation is clear and comprehensive.

COMMENTS: The program starts out with graphs which helps repeating the concept, but as you proceed with the program it becomes more interesting and educational.

PART 3 Overall Evaluation

CHECK ONE.

___Excellent program. Recommend without hesitation.
✓ Pretty good program. Consider purchase.
___Fair. But might want to wait for something better.
___Not useful. Do not recommend purchase.

Reviewer Name Debra Conrad 79

The second important focus for you is the application problems contained in Phase III.

You should inform/remind students that as price and quantity lines move away from 0, located at the bottom left of each graph, this indicates an increase in price and/or quantity. Likewise, price and quantity lines moving closer to the 0 axis indicate a decrease in price and quantity.

You should provide students with a copy of the Student Performance Worksheet.

If you plan to use Marketplace with your entire class, the following suggestion is worth consideration. During Phase I and II, you run the program from the front of the room. To do this, place the Apple computer, disk drive and small television monitor on you desk or cart near your desk, for you alone to look at. On another cart or stand, preferably a tall one, place a large color television monitor for the students to look at. Connect this second, large monitor in series from the small monitor. This hookup arrangement will allow you and your students to see the same image at the same time. Used in this way, the computer becomes just another teaching tool you control.

If you use Marketplace as described above, you should allow three to five days for teaching this topic, especially if you use Phases I-III.

The evaluator recommends the use of this program in General Business class after the class has completed the secon supply and demand in our economy.

FUTURE ACTIVITIES

The use of computers in business and office education is increasing each year and will continue to increase. Accounting operations, office management applications and word processing are just a few areas of instruction which can be performed by computers.

It is the responsibility of the business educator to prepare students and educate students with skills needed for the operation of the computer.

This responsibility could be attained by workshops and graduate classes. Teachers need training for more then just three or four hours. Vendors need to spend more time with the educators, helping answer questions, assisting in setting up the computer in the classroom and continued service after the sell of the computer.

The responsibility of keeping up with new technologies and being aware of what is happening in todays offices, not what books or magazines say what is happening in todays office, is another responsibility of the business educator. It would be very beneficial if the business educator could go out into business offices and have first hand knowledge and experience.

Hours spent in continuing education and in-services would be more beneficial if the business educator spent that

time in an actual office receiving first hand knowledge and experience of what business wants and expects from educators in the field of computer technology.

If the business educator had hands-on-experience with computers for a period of time, more than three or four hours, the knowledge received would carry over into the classroom.

The above comments reflect what other business educators are saying and feeling. Educators feel they need more training, actual hands-on-experience and a direct link with the business work so that they can keep up with todays technology and changing business world.

West Virginia has taken a bold step by installing the first computer networking system in public schools. This is evidence that as educators we are looking forward and training our students for the rapid growth of technology.

OVERALL PROJECT RESULT

A survey of all West Virginia Business Education Teachers was conducted as the first step in this project. An amazing return of over 57% of the surveys proved that business teachers in West Virginia are interested in and concerned with the future of business education in the areas of computers.

As the evaluations were returned, it was discouraging to find that most schools did not have computers in the business departments, the computers were located in the math or science departments. An article in Business Exchange should be read by administrators so that they will know where computers should be located. The article states:

> "In the working world less than 20% of the computers are used for Mathematics and scientific applications, with the remaining 80% being used by busnesses. Yet in education the reverse is usually true."

Software purchased and used in the business classrooms is also limited. Most programs are very expensive and the areas of instruction is limited to typing, accounting and word processing. More software is being produced for business education, but the greatest percentage is produced for math and science.

Software producers need to 'wakeup' and reevaluate the areas in which software needs to be produced to educate students for the workforce.

Another problem the evaluator encountered was that many software companies list software for sale, but when it is ordered the customer is told it will take four to six weeks for delivery. This customer found that some of the companies that advertised software for sale were no longer in business, or addresses and phone numbers were not available so that their software could be purchased.

A great percentage of the evaluations returned had comments that the school was in the process of receiving computers and software had been ordered, but not yet received.

I feel if this survey had been taken in the school year 1984-85 the results would have been more beneficial due to the installation of a state wide networking system.

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